## ABSTRACT OF THE DISCLOSURE

A data encoding/decoding apparatus comprises a decoder which decodes a coded stream, which is formed in a first format and inputted on real time, to generate video data and audio data. A video output memory stores the video data from the decoder. An audio output memory stores the audio data from the decoder. A video input memory is provided to be connected to the decoder through a first data path when the coded stream is transcoded to generate a second stream formed in a second format. An audio input memory is provided to be connected to the decoder through a second data path when the transcoding is performed. An encoder encodes the video data from the video input memory and the audio data from the audio input memory to generate the second stream.